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Report to Congressional Requestors

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November 1985

NATURAL GAS PRICES

FERC Should Improve Its Initial Review of Pipelines' Natural Gas Costs



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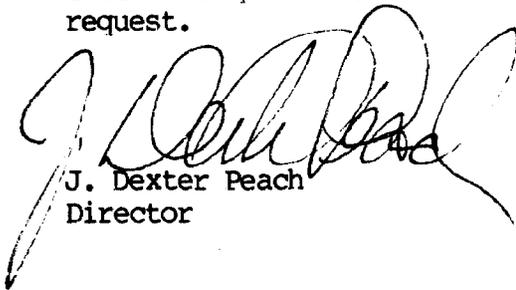
The Honorable Thomas F. Eagleton
United States Senate

The Honorable Michael D. Barnes
House of Representatives

The Honorable George Miller, et al.
House of Representatives

This report responds to your separate, but similar, requests that we examine how the Federal Energy Regulatory Commission reviews certain rate requests by major natural gas pipeline companies. This report contains a recommendation to the Commission's Chairman to establish standards for conducting and documenting its reviews. The Commission generally agreed with our recommendation and indicated to us that corrective action has been taken.

As arranged with your offices, unless you publicly announce the report's contents earlier, we plan no further distribution for 30 days. At that time, we will send copies to the Chairman, Federal Energy Regulatory Commission; the Secretary of Energy; and other interested parties. We will also make copies available to others upon request.

A handwritten signature in black ink, appearing to read 'J. Dexter Peach', written over a printed name and title.

J. Dexter Peach
Director

Executive Summary

Residential natural gas prices increased from an average of \$2.56 per thousand cubic feet in 1978 to \$6.12 in 1984. This increase was largely due to the higher prices that interstate pipeline companies paid for the natural gas they bought and resold.

GAO was asked by 17 members of Congress to examine how the Federal Energy Regulatory Commission reviews the major pipeline companies' requests (filings) to change their rates to reflect changes in their natural gas costs.

Specifically, GAO was asked to examine whether

- the filings submitted were complete and consistent and
- the Commission's analysts appropriately reviewed the filings before they went into effect. (See pp. 8 and 11 to 13.)

Background

The Federal Energy Regulatory Commission regulates the interstate natural gas pipeline companies that link natural gas supplies and consumers. Natural gas supply costs are the companies' major operating expense. For the 20 major companies that were the focus of this study, such costs in 1983 (the latest available data) totaled \$33.9 billion and comprised about 86 percent of the total expenses.

Under the Commission's regulations, the companies are permitted to make requests up to twice a year to adjust their rates to compensate for expected changes in their natural gas costs. These requests are called purchased gas adjustment filings and may include 1,000 or more pages of supporting data.

After a filing is submitted, the Commission normally has 30 days to make an initial analysis. Final approval is sometimes granted at the end of the 30-day period, but more often it is not granted until the Commission conducts an audit of the filing or completes an administrative law proceeding relating to the filing. The Commission usually permits the filings to go into effect at the end of this 30-day period, but such rate changes are subject to refund if the request is not finally approved.

Long periods of time often elapse between the time a filing is submitted and the time it is finally approved. For example, of the 37 filings that the 20 companies submitted in 1982, 15 were still not finally approved as of March 28, 1985. However, all of these filings had been permitted to go into effect. The Commission's regulations require a company to make

an accounting reconciliation between the expected natural gas costs and the costs (as shown in the filing) actually incurred and to make a compensating change in its subsequent rates.

The Natural Gas Policy Act of 1978 and the Commission's regulations establish the maximum price that a company can pay for a specific gas purchase. Pricing categories and corresponding maximum prices vary widely, depending on when and where the gas was discovered, when it was contracted for, and other factors. (See pp. 8 to 11.)

Results in Brief

GAO found that most of the sample of filings it reviewed were permitted to go into effect, even though they were lacking data elements specified by the Commission. Also, the Commission did not require companies to submit certain information that, in GAO's opinion, was needed to determine compliance with applicable regulations. The Commission has since taken actions to improve the filings' completeness and content. (See p. 14.)

GAO could not measure the appropriateness of the initial analyses of the filings because analysts were not required to—and did not—fully document the scope of their work and the methods used in analyzing the filings. Also, GAO found that, lacking standardized criteria and procedures for reviewing the company filings, the analysts applied inconsistent criteria and review techniques. (See p. 22.)

Principal Findings

Completeness and Content

GAO found three problems with the filings' completeness and content. First, 19 of the sample of 26 filings it reviewed were missing one or more required data elements but were allowed to go into effect. For example, three of the filings did not provide information on the contract date for individual gas purchases, even though this information was needed to help determine whether the company paid no more than the maximum allowable price. Second, the Commission did not require companies to specify the pricing category for each purchase, even though this information was needed for the same reason. Third, the filings differed in the format used to present information. These differences could have complicated the Commission's and others' ability to analyze and compare filings. (See pp. 14 to 18.)

During GAO's review, the Commission revised its filing requirements and its method of checking filings' completeness and consistency. These changes addressed all of the problems GAO identified. (See pp. 18 to 20.)

Adequacy of Initial Analysis

GAO found that the analysts applied inconsistent criteria, review techniques, and sampling methods. For example, the analysts told GAO that they reviewed certain schedules for significant fluctuations between filings; however, they said that they had no written criteria or even rough guidelines on what constituted a significant fluctuation. Therefore, each analyst developed and applied criteria on a case-by-case basis. Also, the analysts arbitrarily sampled items for review, and they could not explain how they selected the number or type of items to review. (See pp. 24 to 26.)

In addition, GAO found that the Commission did not require that analysts document the scope of their reviews or the criteria and techniques they used. Therefore, the analysts, when asked, could not reconstruct the work they had performed. (See pp. 26 and 27.)

GAO believes that the initial analysis process is important because (1) rate increases that are later found to be unjustified may have economic consequences on the companies and others that cannot be easily reversed, (2) the filings involve substantial sums of money—the 20 major companies' natural gas and related costs in 1983 totaled \$33.9 billion, and (3) the rate changes may be in effect for lengthy time periods before they are finally approved. Furthermore, GAO believes that the Commission did not have adequate assurance that the initial analyses were thorough enough to determine whether the filings were appropriately reviewed and whether the requested rate changes were justified. (See pp. 9, 11, 22 to 24, and 27.)

Recommendation

Because the Commission took action to correct all the problems identified with respect to the filings' completeness and content, GAO is not making any recommendations in this area.

GAO does recommend, however, that the Commission Chairman develop (1) standardized criteria and guidelines for use in analyzing the filings, including standard sampling methods where applicable, and (2) procedures for adequately documenting the work done in the initial analyses. (See p. 28.)

Agency Comments and GAO's Evaluation

The Commission's Chairman and staff commented on a draft of this report. The Chairman stated that the Commission had generally implemented the criteria and guidelines for analyzing filings and the documentation procedures recommended by GAO. (See app. I, pp. 32 to 41.) GAO believes that the actions, if properly implemented, should correct the problems identified. (See p. 28.)

However, the staff stated that standard sampling techniques do not appear to be practical for use during the initial analysis. GAO notes that analysts will need to use sampling under the new guidelines for analyzing filings and that standard sampling methods have advantages over the arbitrary methods used by the analysts. GAO believes that it can be practical to use standard sampling methods during the initial analysis and, therefore, suggests that the Commission further explore the use of such methods, where applicable, during the initial analysis. (See pp. 28 to 30.)

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Abbreviations

| | |
|------|---|
| BTU | British thermal unit |
| FERC | Federal Energy Regulatory Commission |
| GAO | General Accounting Office |
| MCF | thousand cubic feet |
| NGPA | Natural Gas Policy Act of 1978 |
| OPPR | Office of Pipeline and Producer Regulation |
| PGA | purchased gas adjustment |
| RCED | Resources, Community, and Economic Development Division |

Introduction

According to the Department of Energy's Energy Information Administration, residential natural gas prices increased from an average of \$2.56 per thousand cubic feet in 1978 to \$6.12 in 1984. This increase and uncertainty about future prices have focused congressional and public attention on federal regulation of the natural gas industry.¹ Natural gas accounts for about 25 percent of the nation's energy use.

The Natural Gas Act of 1938 (15 U.S.C. 717) empowered the Federal Power Commission to assure that pipeline companies in interstate commerce charged just and reasonable rates. Producer prices in interstate commerce came under federal regulation after a 1954 Supreme Court decision. During the following years, the Federal Power Commission attempted to establish just and reasonable prices based on the cost of producing natural gas. During the 1960's and the 1970's, the Federal Power Commission permitted higher and higher prices.²

In 1977 the Federal Energy Regulatory Commission (FERC),³ an independent organization within the Department of Energy, replaced the Federal Power Commission. The Natural Gas Policy Act of 1978 (15 U.S.C. 3301) (NGPA), among other things, extended producer price regulation to gas sold in intrastate commerce and further increased ceiling prices for certain types of natural gas. Effective January 1, 1985, pursuant to the 1978 act and FERC regulations, federal price ceilings no longer applied to certain types of domestically produced gas. According to the Department of Energy's Energy Information Administration, such gas constitutes about 55 percent of the total.

Increasing producer prices sometimes created financial problems for pipeline companies, according to the Commission, because there was a lag between the time a company paid a higher price to its suppliers and the time it could increase the rates to its customers. Accordingly, in 1972, the Federal Power Commission amended its regulations to permit

¹The natural gas industry has three principal segments: (1) producers, which find and extract gas from below the earth's surface, (2) pipeline companies, which typically buy the gas from producers, transport it to consuming areas, and resell it there, and (3) distributors, which typically purchase the gas from pipeline companies and resell it to end-users in a given geographic area. Companies in the various segments are sometimes related through corporate affiliations.

²For more information on the evolution of federal regulation, see Information on Contracts Between Natural Gas Producers and Pipeline Companies (GAO/RCED-83-5, Feb. 22, 1983), ch. 2.

³FERC is headed by five Commissioners, one of whom is designated as Chairman. In this report, we use FERC to refer to the agency and the Commission to refer to the five members.

pipeline companies generally to include, in their rate schedules (or tariffs), purchased gas cost adjustment provisions.⁴ Including such provisions allowed companies to seek dollar-for-dollar reimbursement for changes in projected purchased gas costs without making a general rate filing. Such general rate filings covered all of a company's costs and revenues and often took a lengthy period to resolve. The purchased gas adjustment (PGA) filings were expected to reduce the burden on both the Commission and the companies.

In 1978 FERC limited each company to two PGA filings a year and established a schedule for such filings. FERC's regulations specify when a company may submit a PGA request for review and approval. FERC must receive a company's request for a rate adjustment no less than 30 days before its proposed effective date to allow FERC time to review the request, seek and receive public comments, determine if it complies with applicable regulations, and act on the proposal.⁵ In November 1983 FERC issued Order No. 349 to require companies that make PGA filings to use a standard format. The order became effective on June 1, 1984.

According to data reported by interstate pipeline companies, natural gas and related expenses comprised about 86 percent of the major pipeline companies' operations and maintenance expenses. Natural gas and related costs for the 20 companies that were the focus of this study totaled \$33.9 billion in 1983 (latest available data).

Initial Review of Natural Gas Costs

The Natural Gas Act requires that rates charged by natural gas companies be just and reasonable. (Unless otherwise stated, the companies discussed in this report are interstate pipeline companies under FERC's jurisdiction.) A company may seek to change its rates through a general rate filing, which covers all of the company's costs, such as (1) purchased gas costs, (2) other operations and maintenance expenses, (3) taxes and depreciation, and (4) interest expense on borrowed capital, and a fair rate of return on its equity investment.

⁴In some cases individual companies had been permitted—prior to 1972—to make such adjustments.

⁵According to the chief of FERC's Gas Pipeline Rate Adjustments Branch, five companies are required to submit their PGA filings 45 or 60 days in advance.

In addition to these general rate filings, companies may make PGA filings to compensate for changes in their purchased gas costs.⁶ FERC's regulations prescribe what information a company must submit to FERC when requesting a rate change. For PGA filings, a company must provide detailed information on expected gas purchases, including price and volume data; a company must also provide data on actual experience for the prior filing period and compare them with the gas costs that were included in rates for that period.

A company must also show any adjustments from the prior filing. Actual prices paid for natural gas and quantities purchased may differ from projections because supplies may not be available as expected, customers' market requirements may change, and equipment failure or operational problems may affect the company's ability to move certain supplies. Therefore, actual costs of purchased gas recovered for a period often differ from projected costs. The difference between the projected and actual costs results in either an over- or undercollection. It must be accounted for in subsequent PGA filings and in the company's books and records. Furthermore, the company pays interest on these balances if its actual expenses were less than projected and receives interest if actual expenses were more than projected.

FERC is responsible for reviewing and approving all company PGA filings. Primary responsibility is vested in the Office of Pipeline and Producer Regulation (OPPR). A company filing typically is processed as follows:

1. A public utility specialist, or analyst, in OPPR's Gas Pipeline Rate Adjustments Branch reviews the filing for completeness and conformity with applicable regulations and FERC policy and procedures. A memorandum is prepared on the appropriateness of the requested changes. This memorandum is submitted, through supervisory channels, to the Commission. It may cite areas where the filing does not adhere to applicable laws, regulations, and company-specific rate requirements; note objections raised by outside parties, such as a pipeline company's customers; and point out where the filing appears to be inconsistent with FERC policy. Finally, the memorandum recommends a particular course of action to the Commission. According to FERC, the average memorandum is between 5 and 10 pages, with additional pages of worksheets.

⁶For companies that make PGA filings, all rate changes due to changes in purchased gas costs are made through PGA filings, not through general rate filings, except under extremely limited circumstances.

2. An attorney in the Office of the General Counsel also reviews the filing and drafts a proposed Commission order consistent with the OPPR memorandum. The draft order is submitted through supervisory channels to the Commission for consideration and action.

3. The Commission issues an order on the filing. The Commission may (a) approve the requested adjustment as filed, (b) permit the rates to become effective subject to refund and subject to the company filing additional supporting information, (c) permit the rates to go into effect subject to refund pending the outcome of a formal proceeding and a subsequent Commission decision, or (d) reject the request.

Since at least 1980 nearly all filings have been promptly allowed to go into effect, according to the rate adjustments branch chief, but the rate changes have been subject to refund if not finally approved. A considerable period of time may elapse between the date on which a filing is submitted and the date on which it is finally approved. For example, of the 37 filings that the 20 major companies submitted in 1982, 15 were still being considered as of March 28, 1985. Final approval of these filings was typically delayed because of lengthy administrative law proceedings in which the companies' customers and others challenged the rate changes.

Other Reviews of Natural Gas Costs

In addition to the initial review of a company's natural gas costs, FERC has other ways of checking on these costs, as described in its comments (see app. I, pp. 33 to 35). First, the Office of the Chief Accountant audits the natural gas and other costs of regulated companies. These audits examine the companies' records to assure that natural gas costs and related entries are properly recorded. Second, OPPR's staff checks company records to assure that PGA filings accurately reflect actual experience and reasonably project future prices, costs, and sales and checks suspected or known problems identified in the initial review. Third, OPPR's staff makes checks, at both producers and pipeline companies, to verify that producers do not receive more than the applicable ceiling price for gas sales.

Objectives, Scope, and Methodology

This report was prepared in response to requests by Senator Thomas F. Eagleton, Congressman George Miller and 14 cosignors, and Congressman Michael D. Barnes. Various questions about natural gas pricing, supplies, and regulation were posed by Senator Eagleton's October 12,

1982, letter; Congressman Miller's and his cosignors' October 15, 1982, letter; and Congressman Barnes' October 21, 1982, letter.

In response to their letters and subsequent discussions with their offices, we proceeded in three phases: (1) a quick, overall analysis of price increases, (2) city-specific studies of price increases, and (3) a review of how FERC analyzes PGA filings.

We completed the first phase by issuing a report on December 9, 1982, entitled Natural Gas Price Increases: A Preliminary Analysis (GAO/RCED-83-76).

We completed the second phase by issuing a report to Senator Eagleton and another requestor, entitled Natural Gas Price Increases in Kansas City (GAO/RCED-84-77, Feb. 10, 1984), and a report to Congressman Miller, his cosignors, and another requestor, entitled Natural Gas Price Increases in Los Angeles (GAO/RCED-84-178, July 31, 1984).

This report represents the results of the third and final phase of our work. Our overall objective was to evaluate FERC's process for reviewing companies' PGA filings. We reviewed (1) companies' filings submitted to FERC and (2) FERC's initial analysis of the filings.

Although 139 companies are subject to FERC's jurisdiction, only 58 companies use the PGA process. As agreed with the requestors' offices, we limited our review to the major 20 companies, which account for about 90 percent of the gas volumes resold in interstate commerce.

We analyzed applicable laws and FERC's regulations, orders, and correspondence. We also evaluated—based on a sample of filings—the completeness and consistency of the information that the 20 companies submitted in support of their proposed rate filings. The universe from which we selected our sample was the 114 filings that the 20 major companies submitted in fiscal years 1980, 1981, and 1982—the most recent completed years during our review. From this universe, we randomly selected a sample of 30 filings. However, FERC's staff could provide the information necessary for our review for only 26 of the filings. A special assistant to the Director of FERC's Office of Program Management said that she was unable to locate the remaining four filings due to disruptions in FERC's central files unit caused by ongoing building renovations.

We also evaluated FERC's initial analysis of PGA filings. To do this, we reviewed FERC orders, memoranda, and working papers and conducted

interviews with OPRR personnel. We interviewed OPRR's Director, heads of the rate adjustments and field review branches, four senior public utility specialists in the rate adjustments branch, and others. As agreed with the requestors' offices, our work did not address the role of FERC's Commissioners.

As noted above, we set out to evaluate FERC's process for reviewing and approving filings. As agreed with the requestors' offices, we did not attempt either to identify where shortcomings in FERC's review of PGA filings resulted in unjustified price increases or to determine how such shortcomings may have affected the companies' rates.

Furthermore, some of the documents upon which we relied are not available to the public because they are protected proprietary information. Therefore, we do not identify companies by name in this report.

Our review was performed between January 1983 and April 1985. Except as noted, it was conducted in accordance with generally accepted government auditing standards.

Agency Comments and Our Evaluation

The Commission's Chairman commented on a draft of this report. (See app. I, pp. 32 to 41.) FERC expressed concern that the draft report did not reflect the full extent of FERC's review of pipeline company natural gas costs. We revised the report's title to emphasize that we examined only the initial review—before a PGA filing goes into effect. Also, we included a description of other FERC review activities. (See p. 11.)

FERC Revised Its Regulations and Procedures to Remedy Problems in Filings' Completeness and Content

Of the 26 PGA filings we reviewed, 19 did not include all data elements required by FERC's regulations. Nevertheless, FERC accepted the incomplete filings and permitted them to go into effect subject to certain conditions. In addition, FERC's regulations did not require companies to submit certain information that, in our opinion, was necessary to determine compliance with the NGPA. Finally, the filings differed in format, complicating FERC's use of the data.

Before we completed our review, FERC revised its regulations covering both the substance and the format of the required information. FERC also devised a new procedure for checking the completeness and consistency of filings. These changed regulations and procedures address all of the problems we identified.

Most Filings Lacked Required Data Elements

Companies' PGA filings had to include numerous data elements. Some data were to be provided for each gas purchase, including

- the year, month, and day on which the contract covering the gas purchase went into effect;
- the name of the state and producing area including the field from which the purchased quantity was acquired;
- the number of the producer rate schedule governing the purchase;¹
- average rate and aggregate volume data for the filing period; and
- Uniform System of Accounts number² or the accounting classification to which the purchase was assigned.

In addition, all deregulated high-cost natural gas purchases from affiliated companies had to be identified. The price of certain high-cost natural gas—natural gas produced from below 15,000 feet and other minor categories—has been deregulated at the federal level since November 1979.³

¹Before enactment of the NGPA, the price of gas from each well was governed by a rate schedule approved by FERC. The NGPA replaced these schedules by establishing eight major producer price categories and additional subcategories, depending on when and where the gas was discovered, when it was contracted for, and other criteria. Such rate schedules applied only to gas dedicated to the interstate market before the NGPA; rate schedules did not apply to other pre-NGPA gas and do not apply to any post-NGPA gas.

²A group of numbered accounts used to record and categorize financial transactions as prescribed by FERC regulations.

³Not all high-cost natural gas was deregulated in November 1979. Only gas covered by certain sections of the NGPA—sections 107(c)(1) to (4)—was deregulated then.

Other data elements related to the unrecovered purchased gas cost account (known as a 191 Account)—a means of keeping track of differences between each period's projected and actual purchase costs. These data were to be reported monthly for each of eight accounts from the Uniform System of Accounts. Such data included

- volume purchased and aggregate cost,
- per-unit cost, and
- applicable base rate (from the previous filing period).

Companies were allowed to compute interest charges based on the balance remaining in this account. If the balance represented an overcollection of purchased gas costs, the company's customer rates were decreased to reflect the overcollection. If the balance represented an undercollection, the company's customer rates were increased to reflect the undercollection.

We identified 19 data elements that each PGA filing was to include and reviewed 26 filings submitted in fiscal years 1980, 1981, and 1982 to determine the filings' completeness. As shown in table 2.1, we found all 19 required data elements in 7 filings.⁴ However, we found one or two elements lacking in seven filings, three or four elements lacking in six filings, and five or more elements lacking in six filings. We did not try to independently determine which of these data elements were crucial, nor did we ask FERC to make such a determination, because FERC revised the filing requirements during our review.

Table 2.1: Filings and Data Elements Lacking, Fiscal Years 1980-82

| Number of data elements lacking | Number of filings reviewed | | | Total filings |
|---------------------------------|----------------------------|----------|-----------|---------------|
| | 1980 | 1981 | 1982 | |
| 0 | 4 | 1 | 2 | 7 |
| 1 or 2 | 1 | 4 | 2 | 7 |
| 3 or 4 | 1 | 2 | 3 | 6 |
| 5 or more | 1 | 1 | 4 | 6 |
| Total | 7 | 8 | 11 | 26 |

We asked the Director, OPR, why FERC accepted incomplete filings from the companies. He told us that enactment of the NGPA eliminated the need for pipeline companies to identify the producer rate schedule for

⁴Based on our sample results, we estimate, at the 95-percent level of confidence, that the proportion of filings that had incomplete data was between 58 and 88 percent for the 114 fiscal year 1980 to 1982 filings by the 20 major companies reviewed. Because the NGPA in effect replaced the producer rate schedules, we did not count the rate schedule number as a required data element.

each purchase. While we agree that such information may no longer be needed, we believe that other information that was not submitted was necessary for FERC to adequately perform its mission. For example, of the 26 filings, 13 did not show the difference between the monthly per-unit cost and the applicable base rate, and 10 of the filings did not show the monthly per-unit cost. These missing data would have made it more difficult for FERC to check computations relating to the unrecovered purchased gas cost account. Moreover, 3 of the 26 filings did not show the contract date, which can affect the allowable price even under the NGPA.

To determine what action was taken when filings were incomplete, we reviewed FERC's orders on the nine fiscal year 1982 filings that were lacking one or more data elements. We found that the missing data elements caused no delay in the nine filings' effective date. In six of the nine cases, FERC allowed the filings to go into effect, subject to the condition that additional information was to be submitted within 15 to 30 days. However, this information did not relate to data elements that were not reported; instead, FERC required additional information—beyond that already submitted and not required by regulations—to support accounting methodologies and interest calculations in connection with the unrecovered purchased gas cost account. In two cases, the orders did not specify when the additional information had to be submitted. In the remaining case, FERC did not require any additional information to be submitted.

As discussed on page 18, FERC later revised the filing requirements to correct the problems we identified.

Some Needed Information Was Not Required

During our review, FERC's regulations did not require companies to cite the NGPA category designation of purchases nor to identify all purchases from affiliated suppliers. However, in our opinion, this information was needed to determine whether companies complied with the act's eight major pricing categories and subcategories and other provisions.

Because of the large range of ceiling prices under the act, pricing category and subcategory information was needed to determine whether the companies complied with the ceiling prices. Ceiling prices in September 1985 ranged from about \$0.31 per million British thermal units (BTU's—a measure of heat content) for gas qualifying under one subcategory to

\$6.06 per million BTU's for gas qualifying under another subcategory.⁵ Ceiling prices also varied widely within a category. Ceiling prices within section 104—natural gas dedicated to interstate commerce before enactment of the NGPA—ranged from about \$0.31 to \$2.51 per million BTU's.⁶

Information on gas purchases and production by a pipeline's affiliated companies was important because the NGPA limited the prices that could be paid for such gas.⁷ (This limitation is in addition to applicable ceiling prices.) Such information was needed to assess whether the pipeline companies were complying with that limitation.

As discussed on page 18, FERC also revised its filing requirements to correct these problems.

Filings Differed in Format

In addition to 19 of the 26 filings being incomplete, the format used differed from filing to filing. A notable example was the basis for expressing the cost of purchased gas. We also noted other differences with respect to the pressure at which gas was sold and the number of months used to project PGA costs. Such differences could have complicated FERC's and others' ability to analyze and compare filings.

There are, on average, a little more than 1 million BTU's in a thousand cubic feet (MCF) of gas, but for specific purchases the content of a cubic foot typically ranges from 925 to 1,150 BTU's. These differences can be important in determining whether a particular purchase exceeds the ceiling price under the NGPA because all such prices—except for one subcategory—are stated in cents per million BTU's.

For example, in September 1985, the ceiling price for certain section 103 gas (gas from new onshore production wells) was \$3.03 per million BTU's. If the gas contained 1,022 BTU's per cubic foot, the ceiling price on

⁵Ceiling prices increase monthly at the inflation rate or at a specified rate in addition to the inflation rate. In December 1982, for example, the ceiling prices ranged from about \$0.28 to \$5.42 per million BTU's.

⁶Maximum lawful prices are stated in terms of dollars per million BTU's, except for the lowest-price subcategory (minimum rate gas), the price of which is stated in terms of dollars per thousand cubic feet.

⁷As noted on page 14, companies were required to identify affiliated purchases only for deregulated high-cost gas, a small proportion of all gas until January 1, 1985.

an MCF basis would be about \$3.10.⁸ Consequently, any filing that reported purchases on an MCF basis above \$3.10 per MCF would have to be reviewed to determine the BTU content of the particular gas purchase.⁹ Conversely, if the gas contained fewer than 1,000 BTU's per MCF, the effective price—on a BTU basis—might exceed the ceiling price. For example, if the gas contained 925 BTU's per cubic foot, the ceiling price on an MCF basis would be about \$2.80.

We found that four filings expressed gas costs in terms of cents per million BTU's, while 20 filings expressed the costs in terms of cents per MCF (two filings did not express how volumes were measured).

As discussed below, FERC also revised its filing requirements to remedy this problem.

FERC Revised Its Filing Requirements and Procedures for Checking Filings

On November 21, 1983, during our review, FERC approved new regulations that (1) specified a standard format for PGA filings, (2) added certain new filing requirements, and (3) deleted other filing requirements.¹⁰ The regulations were effective June 1, 1984. FERC also developed a new procedure for checking the completeness and consistency of filings.

On July 25, 1983, FERC's Executive Director issued a memorandum, on behalf of the former Chairman, directing three senior FERC officials to draft a standardized format and reporting requirements for PGA filings. In the memorandum, he stated that information from the filings was crucial to fulfilling FERC's regulatory and informational responsibilities. He also noted that "the data being submitted are not standard nor are they formatted in a uniform manner," and that the inconsistencies in the filings' content and format complicated FERC's own use of the filings.

The regulations prescribe, for the first time, a standardized format in which the required information is to be filed. The format shown in the 1972 regulations could be used as a guide, according to the rate adjustments branch chief, but was not a requirement. Moreover, the regulations require for the first time that all projected purchases be reported

⁸The ceiling price was \$3.031 per million BTU's. For ease of presentation, we rounded this ceiling price and others in the report to two decimal points. For the calculations in this paragraph, however, we used the exact ceiling price.

⁹Other possible reasons for high prices are production-related costs and taxes.

¹⁰Standard Form for Purchased Gas Adjustment Filings Submitted by Natural Gas Pipeline Companies, Docket No. RM 83-73-000, Order No. 349, Final Rule.

by NGPA pricing category and subcategory, if applicable; that all gas purchases and production by a pipeline's affiliated companies be designated; and that all purchases—except for one subcategory—be stated on a BTU basis. (Some of the filings we reviewed included such information.) Finally, the regulations eliminate the requirement to file information on producer rate schedules.

As agreed with the requestors' offices, we did not attempt to assess the completeness of filings submitted after these regulations went into effect. However, in March 1985, we met with the rate adjustments branch chief and OPPr's technical analysis branch chief to discuss experience under the new filing requirements. (The latter branch provides computer-related assistance to other OPPr staff.) The former told us that, in the first two rounds of filings submitted under the new filing requirements, most companies were in compliance. However, he also noted that, as expected, some deficiencies were found in the first round of filings submitted under the new requirements.

According to FERC, two types of waivers of the new filing format were granted. First, several companies were not able to implement the new format within the time allowed and were permitted to use other formats for one filing only but were required to use the new format for all subsequent filings. Second, a general waiver was granted for certain purchases from Appalachia. There are thousands of wells in Appalachia producing very small quantities of gas, and small producers operate most of the wells. Because of the small volume of gas and the large number of producers involved, FERC did not consider it cost-effective to require the companies to continually update the standard producer/seller codes for such purchases.

The technical analysis branch chief told us that all of the 20 major companies voluntarily submitted their filings on computer tapes and that the computer was used to test these tapes for completeness and consistency. FERC's staff and the Energy Information Administration developed these tests. Among other tests, FERC makes sure that filings are complete, sums are properly calculated, and certain entries are within a preestablished range. He also said that the companies quickly resolved problems identified by the tests—such as missing or miscoded data. He said, finally, that the second round of filings was better than the first round.

Also, according to the technical analysis branch chief, the paper and computer-tape copies were checked for consistency. He said that, before

the new format became effective, major discrepancies often occurred between the two copies. He said that this occurred when a company updated or made other changes in one version but not in the other version. He also said that the companies are now required to file both copies as of the same date.¹¹ He said that a sample of entries of the two versions are compared for consistency and few discrepancies have been found. However, he added that these discrepancies were not serious and that the companies have been willing to make changes so that the copies are consistent with each other.

Conclusions

Nineteen of the 26 filings we reviewed lacked one or more required data elements. Also, data elements that were not being required were critical to FERC's determining whether the filings complied with applicable laws and regulations. Finally, the filings varied with respect to format. FERC's revised regulations specified a standard filing format for all companies to use, deleted some previously required information, and added some new requirements. These regulations address all of the problems we identified.

Furthermore, FERC permitted companies to make incomplete filings repeatedly and permitted such filings to go into effect promptly. FERC's current procedures for checking filings' completeness and consistency address these problems.

Agency Comments and Our Evaluation

FERC expressed concern about the specific identification of the data elements that were previously required as part of PGA filings and the effects of omitting some of these elements. Although we identified the 19 data elements (based on our analysis of FERC documents), we did not characterize them as "essential," the word used in FERC's comments. As already noted in the report (see p. 15), we did not try to independently determine which elements were crucial, nor did we ask FERC to make such a determination, because FERC revised the filing requirements during our review. Similarly, we did not try to determine the effect of omitting any data elements.

In response to FERC's comments about specific data elements found lacking, we clarified the discussion on pages 14 to 16, with respect to the

¹¹The instructions for filing under the new format state, in part: "A magnetic tape prepared for the electronic computer . . . and accompanied by a verified attested electronic printout . . . is the preferred format" for filing.

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and Content

identification and importance of the missing data elements. Nevertheless, FERC agrees that the previous filing requirements "did not necessarily provide the data needed for review, and the staff was forced to obtain the data through both formal and informal requests" (see p. 39).

FERC's Initial Analysis of Filings Should Be Improved

A PGA filing is initially reviewed by an analyst, who advises the Commission on the filing's propriety. This review process can be a complex and technical undertaking. From less than 100 to over 1,000 pages of information may be submitted in support of a single PGA filing. Although FERC's management provided general direction to analysts on what issues and areas were of major importance and provided limited general guidance during the review process, the analysts developed their own specific review criteria and procedures.

We found that, lacking standardized criteria and procedures for reviewing the company filings, analysts applied inconsistent criteria and review techniques. Furthermore, they could not demonstrate the extent or detail of the work performed nor the criteria used, because they were not required to—and did not—document the items reviewed or the review and sampling procedures used.

As agreed with the requestors' offices, we did not attempt to identify any instances where inadequate initial analyses led to unjustified rates. Moreover, because little documentation was available, we could not measure the appropriateness of the initial analyses. Nevertheless, we believe that FERC's process needs to be improved to provide FERC better assurance that filings were reviewed consistently and requested rate adjustments were justified. The process is important because (1) unjustified rate increases may have economic consequences that cannot be easily reversed, (2) the filings sometimes involve hundreds of millions of dollars, and (3) the rate changes may be in effect for considerable periods of time before they are finally approved.

Importance of Initial Analysis of Filings

Even though companies are required to make an accounting reconciliation of projected and actual gas costs, the economic effects of under- or overcharges may not be easily reversed. If shortcomings in FERC's review of these filings permitted rate changes different from those later shown to be justified, natural gas users, distribution companies, and pipeline companies could have been adversely affected. Therefore, the initial analysis of PGA filings is important to assure that projected gas costs are adequately justified. (According to FERC, filings during the period of our review resulted in undercollections more often than in overcollections.)

Undercharges can result in the shifting of costs between customers purchasing natural gas in different filing periods. For example, if a company significantly undercollects its gas costs during the summer period,

the PGA mechanism permits the company to recover the uncollected costs during the subsequent winter period. Thus, the winter customers' rates would be increased because the summer customers were undercharged. The winter customers would pay not only the additional gas costs but also interest on the unrecovered balance.

Overcharges can result in different economic effects. According to Energy Information Administration data, natural gas prices increased in recent years, both in absolute terms and in relation to other fuel prices. According to our and others' analyses, higher end-user prices for natural gas in recent years were due largely to companies' higher gas purchase costs.¹ As a result, users in all sectors reduced their gas consumption; this reduction was due to lower use of all fuels and to switches from natural gas to other fuels. Overcharges may have contributed to the reduction in gas consumption by raising the price of natural gas beyond the level justified by purchase costs. Lower gas sales may lead to even higher prices later because relatively fixed transmission and distribution expenses are spread over fewer units, resulting in higher per-unit transmission and distribution expenses.² As these expenses are passed along as higher consumer prices, consumption may further decline.

Higher natural gas prices and lower sales affect not only the end-users, as noted, but also the pipeline companies. According to FERC's former Director, Office of Regulatory Analysis, lower sales can affect a company in two ways:

- The company may not be able to recover all of its transmission costs. These are established in advance based on expected sales levels; if sales are lower than expected, the company will not recover all such costs.

¹See our reports cited in footnote 2; Natural Gas Price Increases: A Preliminary Analysis (GAO/RCED-83-76, Dec. 9, 1982); memorandum dated Mar. 8, 1983, from staff to the Director, Office of Regulatory Analysis, FERC; Interstate Natural Gas Association of America, Summary Results of INGAA Survey on Components of Gas Price Increases, Issue Analysis 83I-1, May 1983; and American Gas Association, Cost Components of the Average Gas Price, Energy Analysis 1983-3, Mar. 4, 1983.

²In reports on natural gas price increases in selected cities, we presented examples of how higher natural gas prices led to lower sales and how lower sales contributed to higher per-unit costs for transmission and distribution. See Natural Gas Price Increases in Kansas City (GAO/RCED-84-77, Feb. 10, 1984), pp. 8, 19, and 29; Natural Gas in Philadelphia: Sources, Uses, and Prices (GAO/RCED-84-135, May 23, 1984), pp. 9 and 21; Natural Gas Price Increases in Los Angeles (GAO/RCED-84-178, July 31, 1984), pp. 9, 10, and 22; and Natural Gas Price Increases in Detroit (GAO/RCED-85-48, Jan. 31, 1985), pp. 7, 15, and 28.

- The company might not be able to resell as much gas as it has contracted to purchase; it may, therefore, incur financial liabilities, which may adversely affect its finances.³

Distribution companies could be affected similarly, in our opinion, because the states' overall approach to regulating distribution companies is generally similar to FERC's approach to regulating pipeline companies.⁴

If natural gas prices are later reduced due to the accounting reconciliation, any effects on gas consumption from overcharges may be at least partially reversed, in our opinion. Lower prices may lead to greater sales to remaining customers and encourage former users to switch back to natural gas. However, switchbacks should be expected only if the initial switch was due to overcharges. Even in that case, however, a switchback might not occur because the costs of switching fuels may be very high. For example, switching to coal requires a large initial capital investment. Finally, although an accounting reconciliation would refund gas cost increases, the transmission and distribution cost increases would not be refunded because ratemaking regulations do not generally provide for a reconciliation and refund of other cost increases.

As noted earlier, we did not attempt to determine whether shortcomings in FERC's review of PGA filings resulted in rate changes that were later found to be unjustified. However, if any such changes did result, the subsequent adjustments would not necessarily reverse all their effects.

Lacking Standardized Criteria and Procedures, Analysts' Reviews Were Inconsistent

To assess the guidance provided by FERC's management; criteria, review, and sampling methods used; and documentation prepared, we interviewed the rate adjustments branch chief and four of five senior analysts in the branch. (We did not interview the other analysts in the branch. We limited our work to the senior analysts because we assumed that they were the most experienced and knowledgeable analysts and would best reflect the branch's activities.) We found that the analysts

³See Robert C. Means, *Net-Back Pricing of Natural Gas: FERC Regulation and Producer-Pipeline Contracts*, Jan. 1984, pp. 3 and 4. The author noted that the views expressed were his and did not necessarily reflect those of FERC.

⁴Both distribution and interstate pipeline companies are generally permitted to recover their natural gas and other operating expenses and to earn a fair rate of return on their investments. The city-specific reports cited in footnote 2, p. 23, provide additional details on such regulation. See also our report on *State and Local Responses to Natural Gas Price Increases* (GAO/RCED-83-142, Apr. 20, 1983), especially ch. 2.

were not given standardized review criteria and procedures and their analyses were inconsistent with respect to: (1) the criteria they used in reviewing filings, (2) the amount of additional information they requested from companies, and (3) the sampling techniques they used.

During the PGA review process, the four analysts told us that they were primarily concerned with filing components that most directly affect company rate changes; these included a company's projected purchased gas costs over an upcoming 6- or 12-month period⁵, the adjustments made in prior period filings, and the reconciliation of actual costs with projected costs. This information is found in two major summary schedules—the projected purchased gas schedule and the unrecovered purchased gas schedule—along with several supporting schedules. The analysts said that they were less concerned with other filing components that would have less impact on company rate changes.

The analysts were responsible for determining whether filings were in compliance with applicable laws, regulations, and FERC policies. However, FERC did not develop any specific criteria, review, or sampling procedures for FERC's analysts to use in making these determinations. According to the Director, OPR, such procedures were not needed because the overall guidance was adequate. Rather, each analyst established his or her own criteria, review, and sampling procedures for each filing.

For example, all four analysts said that they screened projected purchased gas schedules and unrecovered purchased gas schedules for any significant fluctuations between filings. However, they said that they had no written criteria or even rough guidelines on what constituted a significant fluctuation, either in terms of the volume of gas purchased or the balance in the unrecovered purchased gas account. Therefore, each analyst developed and applied his or her own criteria on a case-by-case basis.

Further, the scope of the four analysts' reviews frequently differed and they employed arbitrary sampling techniques when determining what they would review. For example, only one of the analysts could document or even estimate the number of items they examined or explain what, if any, sampling techniques they used to select the number or type of items checked. The analysts told us that they scanned the schedules

⁵Companies make PGA filings on an annual or semi-annual basis, as prescribed by the regulations.

provided and spot checked items which, in their judgment, appeared unreasonable or questionable.

In addition, other inconsistencies occurred in what and how the analysts reviewed PGA requests. For example, all four analysts said that they checked the company's calculations of the unrecovered purchased gas account. However, only one analyst said that he reconstructed, time permitting, the method used to calculate interest. As mentioned previously, the interest calculation can cause either a downward or upward adjustment in the rate request.

We believe that these inconsistencies—in deciding what and how to review the filings; the scope or detail of review needed; the sampling method to use, if any; and what constituted adequate support for the filings—were primarily caused by the lack of review standards and guidelines. (Even if review standards and guidelines existed, there could be some inconsistencies because of differences in analysts' training and experience.) The Director of OPRR and the rate adjustments branch chief said that review standards or guidelines were not necessary and were impractical because of the low turnover rate among the analysts and because the unique characteristics of company-specific filing requirements inhibited developing such standards.

With respect to the analysts' turnover rate, our review of 26 filings from 1982-83 showed only 2 cases where the same analyst reviewed all of a company's filings. As for the uniqueness of company-specific filing requirements, most of the information that has to be submitted in a filing must be submitted by all companies.

Analysts Did Not Sufficiently Document Their Review Work

Analysts also maintained little documentation of what they did. A memorandum was prepared on each filing, summarizing the analysts' findings and conclusions. However, the analysts were not required to document the scope of the review nor the analytical techniques used to develop the findings and conclusions.

The Director of OPRR and the rate adjustments branch chief told us that they were not concerned about this lack of documentation. The Director said that, if any questions arose regarding a particular filing and the information was not recorded in the memorandum, the information could be obtained from the analyst who worked on the filing. However, our discussions with the analysts indicated that obtaining such information would be difficult.

The four analysts varied in the ways they documented their reviews.⁶ One analyst said that he underlined or circled the items he reviewed, wrote notes to himself and recorded his calculations, and maintained a personal copy of the filing with all notes and calculations recorded thereon. A second analyst said that he prepared notes on the filing but did not know what happened to them. In neither case were these notes made part of FERC's files. A third analyst said that he made marks on the filing but could not explain what they meant. The other analyst said that she kept no records of her work. Because of these differences, only one of the four analysts could reconstruct the work done.

Conclusions

FERC's management provided general direction to the analysts on important issues to consider during the initial analyses, but it provided no specific standards relating to the criteria to be used and the extent of work to be performed, including sampling methods. As a result, the analysts largely used their own judgment in devising review standards. Also, FERC did not require the analysts to document the scope and depth of their reviews. As a result, FERC did not have evidence that the filings were reviewed thoroughly enough to determine whether the requested rates were justified.

If FERC specified standards for analysts to use in reviewing the filings, there would be less need for analysts to develop their own standards and, therefore, better assurance that all companies' filings were reviewed thoroughly and consistently. If FERC required the analysts to document their work, there would be better evidence on how the filings were reviewed and better continuity in the analyses of a company's subsequent filings. Together, these steps would enable FERC to better determine whether the requested rate adjustments were properly justified.

Recommendation

We recommend that the Chairman, FERC, have the Director of OPRP develop criteria and guidelines for the review of filings, including a

⁶Because of FERC's stated concern that our discussions with its analysts might influence their subsequent testimony in an administrative proceeding with respect to cases that were still being considered, we limited these discussions to cases that had completed FERC's administrative review process. We asked the Director, OPRP, to identify recent major-company filings that had completed the review process. He provided us a list of two filings for each analyst. We discussed one filing with each analyst. The analysts reviewed these filings an average of about 16 months earlier; the range was from 9 to 24 months. This range was due to the high proportion of filings that were involved in the sometimes lengthy review process, as discussed on page 11, above. Because of the consistency in the analysts' answers to our questions, we do not believe that the passage of time in the older cases materially affected the analysts' answers.

standard sampling method—where applicable—for selecting items for review and procedures for adequately documenting the analysts' review process.

Agency Comments and Our Evaluation

FERC said that it implemented standardized criteria and guidelines for analyzing filings and procedures for documenting the analysts' work, as we recommended. We obtained a copy of these guidelines and procedures and discussed it with FERC's staff. It includes general guidelines for reviewing filings and two checklists—the one covering general review requirements, the other covering items of current interest. According to the rate adjustments branch chief, these guidelines represent a compilation of existing (but unwritten) review procedures and do not include any new procedures. Also these guidelines and procedures include procedures for documenting the analysts' reviews. According to the branch chief, the guidelines and procedures were to be used for the first time in analyzing filings submitted in September. We believe that, if properly implemented, they should satisfactorily address the problems noted in these areas.

However, FERC said that it does not seem practical to use standard sampling methods as part of the initial review. FERC said that using such methods could require an analysis of changes in several hundred purchases, which would be difficult within the time period allowed for the initial analysis and which would not allow an analysis of other aspects of a filing. Moreover, FERC said that the types of problems PGA filings pose relate more to such issues as the appropriateness of a company's purchases rather than to such issues as the appropriateness of the prices paid for specific purchases. (The former issues are relatively subjective, while the latter issues are relatively objective.) FERC said that sampling methods would assist in identifying, but not in resolving, such subjective issues and that identifying these issues has not been a problem.

We believe, however, that reviewing the appropriateness of prices paid is an important part of the analysts' work and that standard sampling procedures are needed to effectively perform that work. For example, the new review guidelines call for an analyst, for regulated gas supplies, to compare the base prices with applicable maximum lawful prices and, for deregulated supplies, to verify that the price listed will be in effect when the filing becomes effective. To accomplish these steps an analyst would check on some, but not all, of the thousands of purchases listed in a typical filing. How the analyst decides which purchases and how

many purchases to check involves sampling. Thus, the analyst must use sampling in the initial review. However, the reliability of the results can be significantly affected by the sampling method used. FERC's analysts use arbitrary sampling methods, rather than standard sampling methods.

Standard sampling has two advantages: (1) it produces results that are not affected (biased) by the way in which the sample was selected and (2) the reliability of results can be measured. FERC's comments state that using standard sampling methods could require an analyst to check on several hundred purchases. While it is true that a larger sample size generally results in a more reliable estimate, we did not intend to suggest that FERC use any minimum sample size. Rather, we intended to suggest that, because FERC's analysts are already using some type of sampling in reviewing filings, the use of statistical sampling would produce results that are unbiased and of measurable reliability.

Using standard sampling may take somewhat more time than the current sampling methods and could lead to somewhat smaller sample sizes (assuming that FERC does not devote more staff time to sampling and checking purchases). However, there are counterbalancing benefits: (1) the ability to measure reliability may help the analyst and the Commission to reach a better-informed conclusion about a filing and (2) defined sampling procedures may help the analyst by providing guidance on alternative sample sizes and selection methods.

Furthermore, FERC's comments are based heavily on the constraints of the 30-day review period and the assignment of only one analyst to each filing. As noted above, using standard sampling methods does not require that a sample of several hundred items be selected, nor should it require a significant increase in the staff time devoted to checking purchases. Therefore, such methods need not be inconsistent with either of these constraints. Moreover, FERC may be able to loosen these constraints by requiring companies to file earlier or by assigning more staff. As noted on page 9, five companies are required to submit their PGA filings 45 or 60 days before their effective date.⁷

⁷On April 27, 1984, FERC issued a notice of inquiry on PGA filings, inviting comments to help it determine whether to revise its PGA regulations. In the notice, FERC raised various issues relating to PGA filings including a possible change in the period of advance notice that a pipeline company must provide to FERC. FERC stated, in part, that the "30-day notice period makes it difficult for the Commission . . . to conduct a preliminary evaluation of the pipeline's PGA rate filing. Accordingly, the Commission is considering, and requests comments on a requirement that a pipeline give the Commission . . . at least 45 days notice (or some longer period) for their PGA rate adjustments. . . ." (See Docket No. RM 84-12-000, Revisions to the PGA Regulations, pp. 17 and 18.)

Finally, FERC noted that it is working with the Energy Information Administration to develop computer programs to identify certain problems or changes in filings. If such computer programs can be developed, they would presumably eliminate, or at least reduce, the need for an analyst to select a sample of purchases and check them because the program could be used to validate prices paid. We agree with FERC that such computer programs have the potential to help the analysts to better use their time. Nevertheless, until such computer programs are developed, we believe that FERC should further explore the use of standard sampling, where applicable, as part of the initial review.

With respect to the importance of the initial analysis, FERC said that we did not adequately explain the potential problems associated with undercharges. We included additional discussion on pages 22 and 23.

Advance Comments From the Federal Energy Regulatory Commission

Note: GAO comments supplementing those in the report text appear at the end of this appendix.

FEDERAL ENERGY REGULATORY COMMISSION
WASHINGTON, D.C. 20426

August 27, 1985

J. Dexter Peach, Director
Division of Resources, Community, and
Economic Development
U. S. General Accounting Office
Washington, D.C. 20548

Dear Mr. Peach:

We appreciate the opportunity to review the draft report entitled FERC Should Improve Its Review of Pipeline Companies' Natural Gas Costs. The Commission staff has reviewed the draft and has prepared comments and suggestions to assist in the preparation of any final report. These comments and suggestions are being supplied as follows:

1. Enclosure A provides General Comments on the draft report, including the conclusion and recommendations;
2. Enclosure B provides Specific Comments on particular discussion contained in the draft report, and
3. Enclosure C is a marked up version of the draft report which clarifies and makes more accurate the discussion without in any way changing the substance of the report.

The draft report finds that by changing its filing requirements the Commission has addressed GAO's concerns in that area. The draft report recommends that the Commission adopt standardized criteria and guidelines for analyzing PGA filings and implement procedures for adequately documenting the work performed by the analysts. Such guidelines and procedures have been implemented and the Commission staff is available to discuss this with your staff.

If you wish to discuss this draft report further, we would be willing to do so. Also, we would be willing to review and comment on any revisions to the draft that you might wish to make.

Sincerely,


Raymond J. O'Connor
Chairman

Enclosures

See comment 1.

I. Initial Review of PGA Filing

The GAO report gives an incorrect impression of FERC's review of PGA filings because it limits its scope to the initial review of the PGA filing. Because of the time constraints imposed by the Natural Gas Act, this initial review does not permit the detailed review which the report expects. However, because of the 30 day period allowed for initial review and action, the Commission has established extensive post initial review audits that allow a more detailed review of the PGA filings. The report ignores the extensive post initial review audit work that is done on pipelines' PGA filings and gas purchases. The report assumes that, unless something is caught in the initial review process, it will never be caught and corrected. This simply isn't true.

The FERC has three groups that perform non-periodic audits of pipelines' gas costs. Auditors are sent by the Office of Pipeline and Producer Regulation (OPPR) to both the producers and to pipelines to verify that the producers are not paid more than the ceiling prices to which they are entitled. Second, the Office of the Chief Accountant sends auditors to pipelines for extensive audits of the pipelines' costs (including gas costs). These audits examine the pipelines' records to ensure that the costs reflected in the gas cost and unrecovered gas cost accounts are properly recorded in accordance with requirements of the Uniform System of Accounts. Finally, the Cost Analysis and Field Review Branch of OPPR audits

pipelines to ensure that the pipelines' PGA's accurately reflect actual experience as well as reasonably projected future prices, costs, and sales for the periods the rates are to be in effect. Additionally, these auditors check suspected or known problems identified in the initial review of the PGA and serve as a "backstop" review of the PGA filing. These auditors review PGA filings for compliance with applicable Commission regulations and for correct computation of the charges and rates (including correct computation of interest charges). In effect, during an audit the FERC performs a second and, because of the increased time available, more thorough review of the PGA.

Because the Natural Gas Act requires the Commission to act on PGA filings within 30 days of the date of filing, the initial review is focused by necessity on the components that most affect the change in rates. The review focuses on the largest purchases in terms of cost or volumes which have the greatest rate impact. Because of the increased time and manpower available during the field audits, statistical samples are drawn from the purchases listed in the PGA filings being audited. These audits are conducted in accordance with standard written guidelines. The auditors review the records supporting the sample purchases to ensure that the prices and volumes reflected are accurate and comply with contractual provisions and Commission regulations.

Any problems found as a result of the audits discussed above or found by computer checks are made available to the analyst to assist in the review of the company's filing. All of these serve to supplement the initial review of the PGA filing to provide a more

extensive review than is acknowledged in the draft GAO report.

II. Review Methodology

The report recommends that the Commission develop standardized criteria and guidelines, including standard sampling methods, for the initial review of PGA filings. The report also recommends that the Commission develop procedures for documenting the analysis performed in reviewing PGA filings. We concur with the report's recommendation that written guidelines should be provided to the analyst and that the analyst should document the review done of the PGA filing. Written guidelines have now been developed, and a procedure for documenting the analyst's review has been implemented. However, we do not believe that standard sampling methods should be used in the initial review process because of the size of the samples that would be required for the larger PGA filings and the limited time in which the initial review of the PGA must be completed.

OPPR has developed written guidelines for identifying the items common to all or most PGA's that should be checked in all filings. These guidelines describe situations where the analyst should request additional information from the company to explain the bases for the changes. The guidelines explain the steps that should be taken by the analyst when problems or errors are found in the filings. Because of the wide diversity in the size and complexity of the filings and the continuing emergence of new issues and problems, these guidelines cannot cover all situations that will be encountered by the analyst. Instead they are intended to specify the minimum level of review that should be done of the filing.

OPPR has also developed a procedure for the analyst to document the review done of the filing. Under this procedure, analysts reviewing PGA filings will be able to identify issues or problems that were or were not detected in the review of prior PGA filings.

The use of standard sampling methods for initial review of PGA filings does not appear practical. First, because of the thirty day notice period established by the Natural Gas Act, the time required internally for the review of memoranda, and the time required to prepare Commission orders acting on the filing, the analyst has approximately seven working days to review and prepare a memorandum on the filing. Second, the use of standard sampling methods could result in the requirement that the analyst review whether adjustments were made to, or the basis for the adjustments in, several hundred purchases. If the analyst could not readily identify the reasons for the changes, the analyst would need to seek additional information from the company. The company would probably need several days or longer to provide the additional information. The combination of these factors would make it very difficult to complete the initial review within the time allotted by the statute. Even if the review of the sample could be completed within the initial review period, it would result in the analyst having far less time to examine the items that have the most impact on the rates. Third, the analyst would not have sufficient time to review the sample purchases as well as review the filing for changes in purchasing patterns or to verify the balances in the reconciliation account. As discussed above, standard sampling methods are used in the field audits because of the increased time available for reviewing PGA's on

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Regulatory Commission**

these audits. However, it is not feasible to use standard sampling methods in the initial review process. Fourth, except in rate instances, the initial review does not result in a final determination of the justness and reasonableness of the proposed rates to be charged. Generally it results in suspension of the rates and their collection subject to refund and to any final disposition by the Commission. Sampling methods will provide information on prices being reflected in the filing and the related volumes, but such methods will not determine the prudence of management decisions to make the purchases or whether the amounts paid were excessive due to fraud, abuse, or similar grounds. Experience has demonstrated few examples of pipelines reflecting in PGA's prices not being paid or prices not prescribed by the NGPA; rather, the problems have been with the volumes to be purchased under prudence or fraud and abuse criteria. Recently, the pipelines have been projecting reduced costs through market out and force majeure provisions of their contracts even though the contracts may provide for higher prices. The types of issues presented in PGA filings generally require consideration in technical conferences and formal proceedings. Sampling methods would not assist in the resolution of the issues, only an identification thereof; actual experience shows that identification has not been a problem.

The standardization of the PGA format and the filing of computer tapes by pipelines provide the Commission with the opportunity of developing computer programs to identify certain problems or changes in purchases reflected in the PGA filings. OPR has held discussions with the Energy Information Administration on the feasibility of

having the computer runs identify purchases that reflect significant changes in volumes or prices that could be provided to the analyst during the initial review process. It is envisioned that the analyst would select the purchases that should be further investigated. For example, the analyst could investigate purchases that increased from 5,000,000 Mcf to 7,500,000 Mcf but not investigate purchases that increased from 50 Mcf to 75 Mcf. We believe this type of computer check will address the concerns expressed by the GAO report but would permit a better utilization of the analyst's limited time than the use of standard samples.

III. Completeness of Filings

The report does not identify either the 19 elements that were determined to be "essential" elements or which of these "essential" elements were not included in the filings. The 19 data elements were chosen by GAO. Some of the elements such as producer rate schedules may no longer be considered essential to the review of PGA data because contracts executed after enactment of the NGPA are not subject to Commission jurisdiction and do not carry rate schedule designations; these contracts more than any others have presented and continue to present marketing problems and have generated substantial litigation. As such, it is difficult to tell from the report what the effect was of the omission of some of the 19 "essential" elements. The assumption has to be that the filings should have been rejected as inconsistent with filing requirements, but the true test of such action would be the results. As the draft report points out, gas costs represent roughly 80% of the pipelines' total costs. The pipelines cannot bear a significant increase in

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in these costs without relief. The PGA regulations were designed to provide such relief in a timely manner, but they were implemented in a time when the Commission regulated wellhead prices. The NGPA prescribed a series of statutorily mandated prices which changed the nature of contract and price information. The Commission was faced with implementing the NGPA and particularly Section 601 which deemed the maximum lawful prices to be just and reasonable and permitted their flowthrough except for where the Commission found fraud, abuse, or similar circumstances. Changes in its filing regulations had to be postponed until implementation of the NGPA had been determined. Consequently, the effective PGA filing requirements did not necessarily provide the data needed for review, and staff was forced to obtain the data through both formal and informal requests. This was true until the filing requirements were revised for PGA's to become effective on and after July 1, 1984.

It is unclear as to what the report means by the "price paid" that was omitted from 11 of the 26 filings. Prices change on a monthly basis due to inflation factors. Consequently, the prices reflected are the average prices to be paid during the PGA period. Moreover, the prices that are listed for the past period are the average prices included in the previous PGA filing. It is difficult to understand how the prices could be omitted since these prices are needed to compute the total costs. Similarly, it is difficult to see how the total purchase volumes could be omitted, since this information is needed to calculate the rates. Because some pipelines divide their supplies between the different production areas, the total purchases may not be listed in the backup schedules. However,

these pipelines show the total purchases on a summary sheet when calculating the average cost of gas to be used in the rates. If it is the intent of the report to show that price and volume data were not available to the Commission, then that intent must be measured against information reported to the Commission; information that the GAO staff had access to.

IV. Overcollection of Gas Costs

It should be noted that the PGA regulations were designed to result in a current average cost of gas that slightly understates the actual cost of gas. Pipelines who file semi-annual PGA's are not allowed to reflect supplies that are not attached and flowing as of the effective date of the PGA. In a period of acquisition of significant volumes of new and more expensive supplies (as in 1980 through 1982) this usually results in undercollections of gas costs on a current basis. While the report discusses the effects of overcollections, it doesn't attempt to ascertain whether pipelines have historically undercollected or overcollected their gas costs through the current adjustment. A review of the PGA filings for the period covered by the GAO investigation reveals a predominance of undercollections by the pipelines.

The report states that there are no problems caused by undercollections. This ignores the potential inequities of shifting costs between customers purchasing in different time periods. For example, if a pipeline significantly undercollects its gas costs during the summer period, the PGA mechanism permits collection of some of these costs during the subsequent winter period. In this case the winter residential customers would have their rates increased because the

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summer industrial customers were undercharged for their gas. Finally, when a pipeline undercollects its gas costs, it receives carrying charges on its unrecovered balances. The carrying charges will result in increased costs to be passed on to subsequent customers. The Commission critically reviews undercollections to ensure that the PGA is not being used as a marketing tool or to shift costs among classes of customers. Many pipelines have been placed on notice that they bear the responsibility for demonstrating why they should be able to recover any undercollections; e.g., Midwestern Gas Transmission Company in Docket No. TA85-5-5-002 and Transcontinental Gas Pipe Line Corporation in Docket No. TA85-1-29-000.

The following are GAO's comments on the Federal Energy Regulatory Commission's letter dated August 27, 1985.

GAO Comments

1. Enclosure A is included in this report. Enclosures B and C, which contain detailed suggestions to clarify and otherwise improve the report, are not included. We considered FERC's suggestions and revised the report where appropriate.

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